BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF HAWAII

In the Matter of the Application of
HAWAIIAN ELECTRIC COMPANY, INC.
For Approval of Extension to the Commercial and Industrial Direct Load Control Program and Recovery of Program Costs.

DOCKET NO. 2009-0073

DECISION AND ORDER

DEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF HAWAII

In the Matter of the Application of)

HAWAIIAN ELECTRIC COMPANY, INC.)

For Approval of Extension to the Commercial and Industrial Direct)
Load Control Program and Recovery of Program Costs.)

Docket No. 2009-0073

DECISION AND ORDER

By this Decision and Order, the commission approves HAWAIIAN ELECTRIC COMPANY. INC.'s ("HECO") request for three year extension of its Commercial and Industrial Direct Load ("CIDLC") Program, from January 1, 2010 Control December 31, 2012, but denies without prejudice HECO's request to expand the program. The CIDLC Program's Voluntary Load Control ("VLC") Program, however, shall be discontinued effective January 1, 2010. Consistent with the parameters set forth in this order, HECO is directed to submit a revised 2010-2012 program budget for the commission's review and approval within thirty days of the date of this Decision and Order.

I.

Background

Α.

Description of the CIDLC Program

The CIDLC Program offers eligible commercial and industrial electric customers the opportunity to designate all or

a portion of their electrical load as directly controllable or interruptible by HECO under specific circumstances. It consists of three program elements:

1. <u>Direct Load Control</u> ("DLC") - The DLC Program is targeted to large commercial and industrial customers who have non-critical or generator-backed loads that can be controlled at HECO's request. Whenever there is insufficient generation to meet a projected peak demand period, a participating customer's load is curtailed via a radio frequency signal that is transmitted to an auxiliary load switch located at the customer's site. Load may also be curtailed automatically via an under-frequency relay ("UFR") that is instantly triggered if HECO's system frequency drops to a specified level in response to the loss of a major generating unit or other major system disturbance.

 $^{^1\}underline{\text{See}}$ Application for Program Extension; and Certificate of Service, filed on March 31, 2009 ("Application"), at 6, 9. "Contract interruptible load" is defined as the total amount of controlled load the customer has enrolled in the program as stated in the customer contract. Id. at 3 n.2. The remaining demand is considered the customer's "Firm Service Level" — the amount of electricity that a customer determines is necessary for it to meet its operational requirements during an interruption event. Id.

²In such instances, HECO provides the participating customer with a minimum one-hour notice. <u>Id.</u> at 6.

 $^{^3\}underline{\text{Id.}}$ In such cases, no prior notice is provided. DLC customers, however, may select a non-UFR option in which their elected load will only be curtailed through a dispatched load control event with a one-hour pre-notification message. $\underline{\text{Id.}}$ at 7.

The minimum amount of load to enroll in the DLC Program is 50 kilowatts ("kW"). Participating customers are allowed to aggregate their controlled loads and/or sub-loads from separate sites and/or dispersed customer equipment within the same site, if such aggregated loads are under the ownership of the same company.

In exchange for agreeing to reduce their electrical usage to their designated contracted levels during a mandatory load control event, participating customers receive a monthly demand discount of \$10 per kW (for controlled demand with UFR) or \$5 per kW (for the non-UFR option). Additionally, customers receive an Energy Reduction Incentive of \$0.50 per kilowatt hour ("kWh") of reduction whenever a curtailment event occurs, and an equipment installation allowance of \$3,000 per site to help defray installation costs of enrolling in the program.

2. <u>Voluntary Load Control</u> - The VLC Program offers commercial and industrial customers an alternative to the mandatory load curtailment participation requirement under the

^{&#}x27;Id. at 12. In order to participate, customers must sign an agreement with HECO. Id. at Exhibit C (exemplar CIDLC contract). DLC customers are required to participate whenever a load control event occurs and are subject to penalties for non-compliance. Id. at Exhibits B and C.

⁵<u>Id.</u> at 11.

^{&#}x27;Monthly incentives are paid regardless of whether a curtailment event occurs. <u>Id.</u> at Exhibit B. <u>See also</u> Application, at Exhibit F, at 24 (EnergyScoutTM for Business Information Sheet).

⁷Id. at Exhibit B.

DLC Program. When HECO notifies a customer of a curtailment event, the customer has the option of reducing load in exchange for a performance payment. Thus, in contrast to the DLC Program, loads enrolled in the VLC Program are not guaranteed and incentives are paid on a per-incident basis only.

The minimum amount of load to enroll in the VLC Program is 100 kW. HECO contends that the VLC Program is an effective way to introduce customers to load control programs, with the goal of enrolling such customers in the more beneficial DLC Program. However, HECO indicates that there are no customers currently enrolled in the VLC Program.

3. <u>Small Business Direct Load Control</u> ("SBDLC") - Modeled after HECO's Residential Direct Load Control ("RDLC") Program, the SBDLC Program targets small commercial customers with demands typically ranging from 10 kW to 200 kW. ¹² Similar to the RDLC Program, a radio-controlled switch that is installed next to a customer's water heater, air conditioning unit, or

⁸<u>Id.</u> at 7, 11.

^{°&}lt;u>Id.</u>

¹⁰<u>Id.</u> at 7.

¹¹Id.

HECO completed a four-month pilot SBDLC Program in December of 2008. The pilot program achieved a controlled load of 755 kW through 150 small business customers, controlling 151 water heaters and 2,000 tons of air conditioning systems. Due to the success of the pilot program, HECO is now planning to make the SBDLC Program a permanent element in the CIDLC Program. Id. at 7-8, and Exhibit F (SBDLC Summary Report dated February 23, 2009). The implementation of the SBDLC Program will be conducted by a third-party selected through a competitive bid solicitation process. Id. at 7.

other approved electrical unit turns off the appliance when signaled by HECO, following a one-hour pre-notification message. The radio-controlled switch also includes a UFR that will automatically disconnect the appliance from HECO's system if the system frequency reaches a certain level in response to the loss of a major generating unit or other major system disturbance.

In order to be eligible for the SBDLC Program, customers must have an electric water heater with at least 4.5 kW of heating capacity, an air-conditioner with at least 3 tons of cooling capacity, or other equipment with at least 5 kW of connected load. Customers receive a monthly electric bill credit of \$5.00 for each electric water heater, \$5.00 per ton for each air-conditioning unit, and \$8 per kW for other qualified electrical equipment as an incentive for participating in the program.

HECO asserts that the CIDLC Program serves as an integral part of its load curtailment operation in three primary ways:

- 1. It prevents degradation of system frequency by removing UFR-equipped controlled loads;
- It maintains system reliability by requesting curtailment of interruptible loads enrolled in the CIDLC Program when system resources appear inadequate to meet demand; and
- 3. It enables HECO to systematically reconnect controlled loads in a staged manner following

[&]quot;Id. at Exhibit B.

^{14 &}lt;u>Id.</u>

¹⁵<u>Id.</u> at Exhibits B and F, page 24.

¹6Id.

a system outage, thereby preventing sudden spikes when service is restored.

By reducing the electrical demand through reductions increasing from participating customers rather than by generation, HECO states that the CIDLC Program helps HECO meet system reserve capacity and defers the need for future capacity additions.17 In addition, HECO states that load control helps to 1) increase electrical-grid stability and avert power outages emergency generation shortfalls; 18 during periods of 2) enables HECO to accommodate more renewable energy and manage the frequency fluctuations resulting from intermittent renewable resources connected to the electric system.19

В.

History of the CIDLC Program

initially CIDLC The Program was approved by the commission in Decision and Order No. 21421. filed October 19, 2004, in Docket No. 03-0415 ("Decision and Order Specifically, the commission approved the CIDLC No. 21421"). Program as a five-year pilot program ending on December 31, 2009, pursuant to a settlement agreement between HECO and the Consumer Advocate. As part of the settlement agreement, HECO was allowed

¹⁷<u>Id.</u> at 23-24.

¹⁸<u>Id.</u> at 24.

September 4, 2009 (hereinafter referred to as "HECO's September 4, 2009 letter"), at 4; and Letter from HECO to the commission, dated October 15, 2009 (hereinafter referred to as "HECO's October 15, 2009 letter"), at 2.

to recover its program costs for the first five years of the program using a combination of the IRP cost recovery surcharge and base rates.²⁰

By Decision and Order No. 21726, filed on April 8, 2005, in Docket No. 03-0415, the commission approved HECO's request to amend its CIDLC Program contract to include two inadvertently omitted provisions.

By Decision and Order No. 22587, filed on June 30, 2006, in Docket No. 03-0415, the commission approved HECO's request to increase its equipment budget for 2006 by \$148,400 to cover equipment expenditures carried over from 2005. The commission also granted HECO's request to modify the CIDLC Program contract's liability and indemnification provisions in order to give customers greater flexibility and to allow federal customers to enroll in the program.

By Decision and Order No. 23605, filed on August 15, 2007, in Docket No. 03-0415, the commission granted

²⁰Recovery of CIDLC Program operation and maintenance costs through the IRP cost recovery provision include: (1) Dispatchable demand incentives; (2) Energy Reduction incentives; (3) Equipment Purchases (which are comprised of Central equipment, Distributed equipment, and Communications Expenses/Upgrades); and (4) Outside Services (which are comprised of Engineering Support and site assessments).

Base rate recovery of CIDLC Program operation and maintenance costs originally included: (1) Direct Labor (which includes Administration, Tracking and Evaluation, and Clerical Support); and (2) Materials and Miscellaneous expenses. See Decision and Order No. 21421 at 11-12.

The five-year CIDLC program costs were originally estimated by HECO to be approximately \$5,481,460 and associated revenue taxes, if applicable. <u>Id.</u> at 1. HECO subsequently lowered its estimated five-year program costs to \$4.8 million pursuant to a settlement agreement between HECO and the Consumer Advocate. <u>Id.</u> at 11.

HECO's request for several modifications to the program, including revisions to the existing DLC Program and the addition of the VLC and SBDLC Programs. The commission authorized HECO to recover its additional program costs for the three years from 2007 to 2009 through a combination of base rates and the IRP surcharge, and approved HECO's request to include Rider M, Rider T, and Schedule U customers in the DLC Program, as long as additional loads could be verifiably curtailed above and beyond the customer's current requirements under its current rider or schedule.

Decision and Order No. 23258. filed Βv February 13, 2007, as clarified by Order No. 23448, filed on May 21, 2007, filed in Docket No. 05-0069, the commission denied HECO's flexibility requests with respect to its Demand Side Management ("DSM") programs, but stated that HECO may seek modifications to its DSM programs by letter request, pending the opening of a new docket. The commission subsequently opened Docket No. 2007-0341 to approve the HECO Companies' periodic DSM reports, including Annual Program Accomplishments and Surcharge ("A&S") Reports²² and Monitoring and Evaluation ("M&E") Reports,²³ as well as any requests for DSM program modifications.24

²¹The term "HECO Companies" refers collectively to HECO, Hawaii Electric Light Company, Inc., and Maui Electric Company, Ltd.

²²A&S Reports are filed in or about March following the end of each program year. The A&S Report serves three purposes. First, the A&S Report documents the accomplishments of the programs during the previous calendar year. These accomplishments include an accounting of the energy and demand savings impacts, equipment installations, and expenditures based on full, calendar-year data. Second, the A&S Report reconciles

By Order No. 24232, filed on May 15, 2008 in Docket No. 2007-0341, the commission set the CIDLC Program budget for 2008 according to the actual amount expended by HECO in 2007, or \$889,565, but allowed HECO the opportunity to file supplemental information to support an increase in its 2008 program budget. HECO filed supplemental information on June 18, 2008, indicating that the requested increase in its 2008 program budget was due primarily to higher levels of customer participation than what was previously forecasted and experienced in 2007. By Order Regarding Demand-Side Management Programs' Goals and Budgets, filed on July 7, 2008, the commission granted HECO's request to increase its 2008 program budget to \$3,416,246.

By Order Regarding HECO's Annual Program Modification and Evaluation Report, filed on September 30, 2008, filed on

the revenues collected from the cost recovery surcharge adjustment and actual program costs incurred. Third, the A&S Report establishes and documents program cost-effectiveness based on recorded costs and measure adoptions.

²³M&E Reports are filed in or about November prior to the beginning of the next program year. The M&E Reports serve three purposes. First, the M&E Report forecasts the budgets and impact goals (i.e., energy demand reduction measured in megawatts and energy savings measured in megawatt-hours) for the upcoming calendar the Report describes year. Second, M&E modifications in program processes that the HECO Companies propose to introduce in the upcoming calendar year. Third, the M&E Report provides results of both the program Impact Evaluation Reports and the program process evaluations, as they become available.

²⁴See Docket No. 2007-0341, Order No. 23717, filed on October 12, 2007(opening docket); and Order No. 23861, filed on November 30, 2007 (adopting procedures for reviewing DSM reports and requests for program modifications).

November 14, 2008 in Docket No. 2007-0341, the commission approved HECO's 2009 CIDLC program budget of \$4,091,320. 25

C.

Application to Extend CIDLC Program

On March 31, 2009, HECO filed an application for approval to: (1) extend its CIDLC Program for an additional three years, from 2010 through 2012, and (2) recover its program costs, which are estimated to be approximately \$16.1 million and associated revenue taxes, if applicable, through a combination of base rates and HECO's IRP cost recovery provision. HECO states that the CIDLC Program has experienced considerable growth following commission approval of modifications to the CIDLC Program in August 2007. There are currently 48 commercial and industrial customers enrolled in the program, providing a total of 27 MW of contract interruptible load. Based on the current level of participation, HECO anticipates exceeding the program

²⁵See HECO's M&E Report, filed on September 30, 2008, at Attachment A, page 5; and Letter from HECO to the commission, filed on January 20, 2009 in Docket 2007-0323, at Exhibit A, page 11. See also HECO's September 4, 2009 letter, at Attachment A, page 1.

 $^{^{26}\}underline{See}$ Application at 1. HECO served copies of its Application on the Division of Consumer Advocacy, Department Of Commerce and Consumer Affairs ("Consumer Advocate"), which is an $\underline{ex\ officio}$ party to all proceedings before the commission. See Hawaii Revised Statutes § 269-51 and Hawaii Administrative Rules § 6-61-62.

²⁷See Application at 4.

²⁸See HECO's September 4, 2009 letter at 1.

goal of 24 MW with a total program interruptible load of 27.6 MW by 2009 year-end.²⁹

HECO is now seeking to extend the CIDLC Program for another three years, from 2010 through 2012, to continue annual incentive payments of approximately \$3.6 million to existing participants who are expected to continue in the CIDLC Program beyond December 31, 2009. HECO also seeks to expand customer enrollment for an additional 8.4 MW of contracted interruptible load in the next three years of the CIDLC Program, for a total program interruptible load of 36 MW by the end of 2012. The following table summarizes HECO's estimates of the yearly and cumulative impacts of the CIDLC Program:

Program Calendar Year	Incremental Contract Interruptible Load (kW)	Cumulative Contract Interruptible Load (kW)	Cumulative Contract Interruptible Load with Previously Acquired Load (kW)
Year 6 - 2010	4,426	4,426	32,000
Year 7 - 2011	2,000	6,426	34,000
Year 8 - 2012	2,000	8,426	36,000

 $^{^{29}\}underline{\text{See}}$ Application at 5, and 8 n.5. See also HECO's September 4, 2009 letter at 1.

³⁰See Application at 3. In its Application, HECO further states that it plans to seek commission approval via a separate application to conduct a third-party demand response aggregator pilot program. <u>Id.</u> at 9 and Exhibit G; and HECO's September 4, 2009 letter at 2-3. The purpose of the one-year pilot program is to identify new market potential for price and event programs, and evaluate the use of third-party demand response aggregator services in Hawaii.

³²See Application at 25. The commission notes that Table 5 of HECO's Application appears to contain a typographical error with respect to the cumulative contract interruptible load for 2011 and 2012.

HECO's request to extend the CIDLC Program for an additional three years is intended to: 32 (1) provide the opportunity for flexibility in the implementation of the program by allowing HECO time to conduct a third-party aggregator pilot and evaluate the potential role and benefits of using a third-party aggregator; (2) allow HECO time to evaluate its SBDLC and VLC Programs to determine if any future program design modifications are necessary; (3) allow HECO to evaluate future smart grid technologies and other two-way communication technologies for demand response initiatives and determine how such technologies may impact the design of new load control programs; and (4) enable HECO to better evaluate the role and design of load control programs as part of its overall long-term resource plan, through the development of the Clean Energy Scenario Planning process.

The total CIDLC Program budget for 2010 to 2012 is \$15,849,233.³³ Program costs include customer incentives, labor and administration, tracking and evaluation, equipment purchases, outside services, marketing, and miscellaneous expenses.³⁴ Estimated program costs do not include reimbursements for the Energy Reduction Incentive, which is paid to DLC customers on a

³² See HECO's September 4, 2009 letter at 2.

³³See Application at 28, and Exhibit A; and HECO's M&E Report, filed on November 30, 2009, at Attachment A, page 2 (revising HECO's estimated 2010 CIDLC program budget to incorporate changes reflected in its 2009 test year rate case, Docket No. 2008-0083).

³⁴See Application at 28.

per-incident basis.35

HECO estimates that the capacity savings generated through its CIDLC Program are over \$38.2 million. In addition, HECO states that the CIDLC Program may provide additional production cost savings by reducing labor and other operation and maintenance expenses associated with additional generation. It also may reduce spinning reserve requirements, which in turn could result in the deferral of the startup timing of HECO's generating units and a reduction in fuel, operation, and maintenance costs. 18

HECO evaluated the costs and benefits of the CIDLC Program using four cost-effectiveness tests, as defined in the California Standard Practice Manual, Economic Analysis of Demand. Side Management Programs - the Utility Cost Test, Rate Impact Measure Test, Participant Test, and the Total Resource Cost Test. Based on its calculations, HECO asserts that the cost-effectiveness ratios for the CIDLC Program over twenty years are as follows:

 $^{^{35}}$ <u>Id.</u> at 28-29. Instead, these costs will be recorded by HECO on an annual basis for recovery in the following year. <u>Id.</u> at 28.

³⁶<u>Id.</u> at 25. The estimated cost savings of the CIDLC Program is calculated on a net present value basis using a 7.862% present value factor and a base year of 2009. <u>Id.</u> at Exhibit L.

³⁷<u>Id.</u> at 25.

 $^{^{36}}$ These additional cost-saving benefits, however, were not calculated in HECO's Application. <u>Id.</u>

³⁹<u>Id.</u> at 29-32.

⁴⁰<u>Id.</u> at 31. HECO states that it is currently in the process of conducting an impact evaluation for its load control programs.

Test	Benefit/Cost Ratio
UC	1.14
RIM	1.14
Participant	182.65
TRC	3.74

In its Application, HECO also states that it plans to continue using targeted marketing techniques for the DLC and VLC Programs, and will target customers in the P and J rate classes. Administration, marketing, and execution of the SBDLC Program will be performed by a third-party selected through a competitive bid solicitation process planned for the third quarter of 2009.

In terms of program evaluation, HECO states that it will develop a tracking system to monitor program implementation and to ensure prudent expenditure of incentives and program funds. The tracking system will record information on participating customers, address, utility account number, pre-installation demand use, amount of controlled load, contract Firm Service Level, cost of equipment system, request for program operation and subsequent compliance, utility account representative, the dates of the key transactions related to the

HECO's consultant, KEMA, expects to complete its analysis by the end of December 2009 and issue a final report shortly thereafter. See HECO's October 15, 2009 letter, at 3. In conjunction with the issuance of KEMA's impact evaluation report, HECO plans to update its cost-effectiveness analysis for its load control programs and seek modifications to the CIDLC Program, if warranted. Id.

⁴¹See Application at 21.

^{42 &}lt;u>Id.</u>

⁴³Id. at 26.

completion of equipment installation, and the amount of available interruptible load based on the actual metered data." The tracking system will be used to evaluate the program by assessing the customers' demands at the time of a load reduction event, the amount of load relief provided, cost of the installation, incentives paid, and other information.⁴⁵

Furthermore, HECO proposes to conduct a process evaluation in the second year following the extension of the SBDLC Program (in 2011) to evaluate the program design, implementation procedures, communications, and service delivery. HECO also intends to continue providing the commission with information regarding the CIDLC Program through its two annual filings - the A&S and M&E reports.

D.

Cost Recovery

HECO seeks approval to recover its expenditures for direct labor and administration, tracking and evaluation, marketing, and miscellaneous program costs through base rates. 47

[&]quot;Id.

^{45 &}lt;u>Id.</u>

⁴⁶<u>Id.</u> at 27.

⁴⁷<u>Id.</u> at 32, and Exhibit A. HECO originally estimated its expenses for direct labor, tracking and evaluation, marketing, and miscellaneous program costs to be \$2,667,000 (or \$889,000 per year for the next three years). HECO subsequently revised its 2010 estimated CIDLC program budget to incorporate changes reflected in the 2009 test year rate case in Docket No. 2008-0083. <u>See</u> HECO's M&E Report, filed on November 30, 2009, at Attachment A, page 2. Therefore, base expenses, at least for 2010, are estimated to be \$663,000.

Second, HECO requests that it be allowed to continue using the DSM Adjustment component of the IRP cost recovery provision to recover its incremental program costs for customer incentives, equipment purchases, and outside services. Third, HECO requests that it be allowed to continue contemporaneous expense recovery.

HECO estimates that the annual ratepayer impact of the CIDLC Program is as follows: 49

Program - Calendar	Rate Impact
Year	\$/kWh
Year 6 - 2010	0.0008
Year 7 - 2011	0.0009
Year 8 - 2012	0.0010

Ε.

Consumer Advocate's Position

On October 2, 2009, the Consumer Advocate filed its Preliminary Statement of Position stating that that it would not be participating in this proceeding due to limited resources. The Consumer Advocate, however, reserved the right "to review and address the actual costs that may be recovered by HECO's

The recovery of these costs through base rates is being addressed as part of HECO's 2009 test year rate case, Docket No. 2008-0083. As a result, HECO states that it is not requesting any commission action in this docket on the base rate recovery for these cost categories. <u>See</u> Application at 32.

⁴⁸<u>Id.</u> at 32, and Exhibit A. HECO estimates that its total program costs for incentives, equipment purchases, and outside services expenditures to be approximately \$13,408,233.

⁴⁹Id. at 34.

ratepayers" in connection with the requested extension of the CIDLC Program at the time cost recovery is sought by HECO.

II.

Discussion

Α.

HECO's Request to Extend and Expand the CIDLC Program

Section V.A.1 of the commission's Framework Integrated Resource Planning dated May 22, 1992 ("Framework")50 states, in relevant part: "A purpose of piloting demand-side management programs is to ascertain whether a given program, not yet proven in Hawaii, is cost-effective - whether it will have the penetration and will achieve accomplishment of the utility's objectives as originally believed." As set forth in Section V.A.2 of the Framework: "A second purpose of piloting demand-side management programs is to determine whether the program design and configuration (including how it is managed and promoted) are such as to permit implementation of the program as efficiently and effectively as desired.

As noted above, the CIDLC Program was approved as a pilot program for a five-year period ending December 31, 2009,

⁵⁰By Decision and Order No. 11523, filed on March 12, 1992, as amended by Decision and Order No. 11630, filed on May 22, 1992, in Docket No. 6617, the commission established the IRP Framework and required electric and gas utilities in the State to develop IRP plans in accordance with the IRP Framework. According to the IRP Framework, the "goal of integrated resource planning is the identification of the resources or the mix of resources for meeting near and long term consumer energy needs in an efficient and reliable manner at the lowest reasonable cost." See IRP Framework, Section II.A., at 3.

pursuant to an agreement between HECO and the Consumer Advocate. As part of that agreement, the Consumer Advocate "noted that it continues to have the same concerns with the CIDLC Program as it did with a similar program proposed in 1996, Docket No. 96-0194" but that it was "willing to support the implementation of the instant program as a pilot program, to allow the [p]arties [] an opportunity to gather information that would be useful in assessing the impacts of such a program and determining whether such programs are cost-effective and should be continued in the long-term." ⁵¹

Here, HECO seeks to expand the CIDLC program to allow for additional customer enrollment (estimated at an additional 8.4 MW of interruptible load in the next three years). commission, however, is concerned that there has sufficient effort by HECO to gather information to determine whether the program, as designed, is cost-effective and should be continued in the long term. Specifically, there is nothing in the record to indicate that HECO has evaluated whether "the program design and configuration (including how it is managed and promoted) are such as to permit implementation of the program as efficiently and effectively as desired." Notably, HECO states that it is currently conducting an impact evaluation of its CIDLC Program to "look at the historical 15-minute interval telemetry data from the participating customers to help to develop a cumulative load profile for the program" to understand "how much

 $^{^{51} \}text{Decision}$ and Order No. 21421, filed on October 19, 2004, in Docket No. 03-0415, at 10.

controllable load is available on an hourly basis" to better "model the benefits to the system." HECO however has yet to complete this evaluation, and instead states that its consultant is "targeting the end of December 2009 for the completion of its impact findings, and a final report will be issued soon thereafter." HECO indicates that it will file its updated cost effectiveness analysis in the first quarter of 2010 and, if warranted, will submit any modifications to the CIDLC Program. In the commission's view, it would be inappropriate at this time to allow expansion of the program before completion of the impact evaluation and other evaluation necessary to determine whether the program is designed and being implemented efficiently and effectively.

In addition, the commission is concerned that the requested program expansion as described in HECO's Application has not been examined by HECO, the Consumer Advocate, or the commission in a comprehensive planning process such as the IRP process. Because the proposed expansion has not been evaluated as part of a comprehensive planning process, the commission cannot properly determine whether an expansion of the CIDLC Program is warranted at this time. In fact, HECO itself acknowledges that further evaluation is needed to examine the role and design of HECO's load control programs as part of HECO's

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⁵²See HECO's October 15, 2009 letter, at 3.

⁵³<u>Id</u>. The commission notes that an impact evaluation should have been completed <u>before</u> HECO submitted its Application to expand the RDLC Program.

overall long-term resource plan, as well as the interaction between the CIDLC Program and other proposed programs.⁵⁴

Given the lack of comprehensive planning, it is unclear how effective the proposed expansion will actually be in deferring the need for future capital investment. In its Application, HECO claims that "[o]ver the twenty-year life of the [CIDLC] program[,] the capacity savings are estimated at over \$38.2 million on a net present value basis using a 7.862% present value factor and a base year of 2009." HECO's projected capacity cost savings are primarily based on its contention that "the RDLC and the CIDLC Programs have the effect of deferring the need date of the addition of a steam turbine to convert the first simple cycle combustion turbine to a single train combustion turbine at Campbell Industrial Park from 2019 to 2024." 56

HECO's projected capacity savings, however, are based on the assumption that its load control programs will be continued through the 2019 to 2024 timeframe. Without a comprehensive plan by HECO, however, there is no guarantee that HECO's load control programs will be continued beyond the 2012 extension as requested herein. If HECO's load control programs were discontinued prior to 2024, then the cost-benefit analyses presented by HECO would no longer be valid.

 $^{^{54}\}underline{See}$ Application at 4. $\underline{See\ also}\ \ HECO's\ September\ 4,\ 2009$ letter, at 2.

⁵⁵See Application at 25, and Exhibit L.

⁵⁶<u>See</u> Application, at Exhibit L. <u>See also</u> RDLC Application filed in Docket No. 2009-0097, at 17.

More importantly, HECO anticipates having a reserve capacity surplus during the 2010-2012 timeframe, even without the proposed expansion of its load control programs. HECO states that with the addition of Campbell Industrial Park Combustion Turbine-1, there is a forecasted reserve capacity surplus of 60-120 MW in 2010 and 0-60 MW in 2012.⁵⁷ These forecasts include the existing 58 MW contributions from the RDLC and CIDLC Programs.⁵⁸ Therefore, an expansion of HECO's load control programs at this point in time is not required to meet HECO's capacity requirements for 2010 through 2012, and would actually add to a forecasted capacity surplus.

Based on the foregoing, the commission finds it appropriate to allow extension of the existing CIDLC Program (the DLC and SBDLC Programs) for an additional three years on a pilot basis, but defers HECO's proposed program expansion until further analysis and review have been completed. Therefore, HECO's request to extend the existing CIDLC Program (the DLC and SBDLC Programs) for an additional three years, from January 1, 2010 through December 31, 2012 is granted on a pilot basis, but HECO's request to expand the CIDLC Program and enroll additional customers for an additional 8.4 MW of interruptible load is denied.

 $^{^{57}\}underline{\text{See}}$ HECO's September 4, 2009 letter, at 4 (citing HECO's Supplemental Testimony, HECO ST-4, at pages 10-12, filed in its 2009 test year rate case, Docket No. 2008-0083).

^{58 &}lt;u>Id.</u>

Termination of the VLC Program

The VLC Program was added as a CIDLC program element in 2007. According to HECO, there are "no customers currently enrolled in this program at this time[.]"⁵⁹ HECO, however, states that it will continue to monitor the program to determine whether future design modifications are warranted.⁶⁰

Without an analysis of the program design and the reasons for the lack of interest in this particular program as compared to the DLC and SBDLC Programs, the commission is not inclined to extend the VLC Program. Accordingly, the VLC Program shall be discontinued effective January 1, 2010.

С.

Cost Recovery

In approving HECO's request to extend the existing CIDLC Program (DLC and SBDLC Programs) for an additional three years, the commission also authorizes HECO to recover its program costs for the existing DLC and SBDLC Programs through a combination of base rates and the IRP surcharge.

Existing DLC and SBDLC program costs for direct labor and administration, tracking and evaluation, and miscellaneous program costs may be recovered through base rates. However, because extension of the DLC and SBDLC Programs is limited to maintaining existing program participants, the recovery of

⁵⁹See Application at 7.

^{60 &}lt;u>Id</u>.

program costs through base rates shall not include costs related to expansion of the CIDLC Program for new customers, such as marketing or advertising costs, as such costs would not be considered necessary for maintaining existing program participants.

HECO may continue to use its IRP cost recovery provision to recover incentive payments for existing CIDLC customers, outside services (for equipment maintenance and removals), and equipment purchases (for central equipment and communication expenses/upgrades). The recovery of such costs, however, shall be limited to those costs that are necessary to maintain the existing DLC and SBDLC Programs.

III.

Orders

THE COMMISSION ORDERS:

- 1. The commission approves HECO's request for a three year extension of its existing CIDLC Program (DLC and SBDLC Programs), from January 1, 2010 through December 31, 2012, but denies without prejudice HECO's request to expand the enrollment of customers in the CIDLC Program.
- 2. The VLC Program shall be discontinued effective January 1, 2010.
- 3. HECO shall be permitted to recover through base rates its program costs for existing CIDLC customers for direct labor and administration, tracking and evaluation, and miscellaneous program costs (less the corresponding costs

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associated with the VLC Program). Recovery of such costs through base rates shall not include marketing or advertising costs.

- 4. HECO shall be permitted to continue using its IRP cost recovery provision to recover incentive payments for existing CIDLC customers, outside services (for equipment maintenance and removals), and equipment purchases (for central equipment and communication expenses/upgrades), to the extent such costs are necessary to maintain the existing DLC and SBDLC Programs.
- 5. Any existing CIDLC program costs that are recoverable through base rates may not be recovered through HECO's IRP cost recovery provision.
- 6. Within thirty days of the date of this Decision and Order, HECO shall submit a revised 2010-2012 program budget for the commission's review and approval.

PUBLIC UTILITIES COMMISSION OF THE STATE OF HAWAII

Carlito P. Caliboso, Chairman

Leslie H. Kondo, Commissioner

APPROVED AS TO FORM:

Commission Counsel

2009-0073.cp

CERTIFICATE OF SERVICE

The foregoing order was served on the date of filing by mail, postage prepaid, and properly addressed to the following parties:

DEAN NISHINA
EXECUTIVE DIRECTOR
DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS
DIVISION OF CONSUMER ADVOCACY
P. O. Box 541
Honolulu, HI 96809

DEAN K. MATSUURA
MANAGER, REGULATORY AFFAIRS
HAWAIIAN ELECTRIC COMPANY, INC.
P.O. Box 2750
Honolulu, HI 96840-0001